Portable Particle Counter
PiC 9300

max. nominal pressure 315 bar (4480 psi)

1. Features

- Rugged portable unit for quick and simple particle analysis on site
- Simple menu-driven operation via touch screen
- Laser sensor with for exact and reproducible results
- Demountable tank for the measured fluid with overflow safety device
- Suitable for suction side- and pressure side operation
- Integrated suction pump patented double pump system, viscosity and pressure independent flow control
- Prior to each measurement automatic flushing of the gauge head
- Long term measurements
- Adjustable measuring mode (single and cyclic measurements)
- Manual flush valve for quick internal hose flushing
- Calibration according to ISO 11171: 1999 (NIST)
- Analysis according to ISO 4406: 1999
- Measuring range 4 µm(c), 6 µm(c), 14 µm(c)
- Analysis according to SAE AS 4059
- Measuring range 4 µm(c) – 70 µm(c) in 6 channels
- Analysis according to NAS 1638
- Indication of the absolute numbers of particles in all channels
- Timer
- Definable measuring series
- USB and serial interface for further data processing via PC
- Integrated large printer (114 mm) for printing of clearly presented measuring data
- With evaluation software for PC
2. Technical specifications

Pressure connection: Measuring connection M16, max. 315 bar (Minimes)
Suction connection: Screw connection 6 L, max. 10 bar (140 psi)
Return line: Screw connection 6 L
Pressure fluctuation: permissible
Medium: hydraulic fluids, fuels, water
Seals: FKM, optionally FFKM
Viscosity range: max. 500 mm²
Temperature range ambience: 0 to +50 °C
Temperature range fluid: 0 to 80 °C
Sensor flow rate: 30 ml/min
Flushing volume flow: 30 ml/min
Measuring volume: 10 to 100 ml, adjustable (10 ml steps)
Volume prior to counting: 10 to 100 ml, adjustable in (10 ml steps)
Counting time: 30 s
Cycling time: 1 to 99 min
Sensor: Laser diode sensor
Tank volume: 1 l
Indication acc. SAE AS 4059: >4/>6/>14/>21/>38/>70 µm(c)
Measuring range acc. SAE classes:
Indication acc. ISO 4406: 1999 >4/>6/>14 µm(c)
Measuring range ISO classes: 1 to 24
Indication acc. NAS 1638 2-5/5-15/25-50/50-100 µm
Indication NAS class 1 to 12
Calibration: acc. ISO 11171: 1999
Power supply: 100 to 230 VAC; 50/60 Hz; or integrated accumulator
Dimensions: 320x450x300 mm (HxWxD)
Weight: approx. 12 kg

Subject to technical alteration without prior notice.

3. Technical manual

The portable particle counter PIC 9300 consists of a sensor with pump/volume regulation unit and tank with overflow safety device. The counted results are displayed on a touch screen monitor and can be printed with the integrated thermal printer. Thanks to the strengthened polyamide plastic moulding material, the housing has an optimal compatibility against all common pressure fluids. The electrical connections are placed at the backside of the unit and are therefore properly protected. For the electrical connecting cable, accumulator and hoses is a separate compartment available. Due to the removable cover is an optimal access to all control elements, a safe storage and transport ensured. For data transfer to a PC is an USB and a serial interface available. Also, it is possible to store the data via a second USB interface in an Excel compatible format. Monitoring available in languages German, English and French.
## 4. Order numbers and scope of supply

<table>
<thead>
<tr>
<th>Designation</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC 9300 VP</td>
<td>72443213</td>
</tr>
<tr>
<td>Particle counter with power pack, external mains charger, Measuring and analysing Software &quot;Log and Show&quot; Seals in FKM</td>
<td></td>
</tr>
<tr>
<td>PIC 9300 FFKM VP</td>
<td>70529640</td>
</tr>
<tr>
<td>Particle counter with power pack, external mains charger, Measuring and analysing Software &quot;Log and Show&quot;Seals in FFKM</td>
<td></td>
</tr>
</tbody>
</table>

### 4.1 Scope of supply

### 4.2 Software description

- Reading out of measurement values from PIC 9300
- Monitoring of measurement values in schedule or graphic, time profile monitoring
- Monitoring selection acc. ISO 4406 (1999) or SAE AS 4059
- Indication of the absolute numbers of particles in all channels
- Data saving, commentary and printer control
- Remote control function of PIC 9300 and adjusting of all parameters
- Export of values to spreadsheet programs (e.g. Excel)
- PC configuration: Pentium processor, USB or COM-interface